BRUHAT BANGALORE MAHANAGARA PALIKE

Project: Improvements to Roads and Drains Adjacent to St. Johns school at Amruthahalli in ward No 07 - Byatarayanapura, Kodigehalli Sub Division.

Est Cost: =40.0Lakh

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Desilt	Cum							
	St John's School								
	Road1		2	100.00	0.70	0.60	84.00		
	Road2		2	230.00	0.70	0.60	193.20		
	Shriya residency/Varadraj Residency								
	Rhs Roads								
	1st Cross		2	75.00	0.70	0.60	63.00		
	2nd Cross		2	75.00	0.70	0.60	63.00		
	3rd Cross		2	65.00	0.70	0.60	54.60		
	4th Cross		2	65.00	0.70	0.60	54.60		
	5th Cross		2	60.00	0.70	0.60	50.40		
	6th Cross		2	70.00	0.70	0.60	58.80		
	Over Burden Earth								
			2	150.00	0.80	0.50	120.00		
							741.60	186.92	**138619.87**
2	Removing & Refixing Stone slabs of drains and Pointing in C.M(1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)								
	BS Slab Drain	Sqm							
	Damaged Drain								
	Road1		2	20.00	1.35	--	54.00		
	Road2		2	50.00	1.35	--	135.00		
	Shriya residency/Varadraj Residency								
	1st Cross		2	20.00	1.35	--	54.00		
	2nd Cross		2	20.00	1.35	--	54.00		
	3rd Cross		2	18.00	1.35	--	48.60		
	4th Cross		2	20.00	1.35	--	54.00		
	5th Cross		2	20.00	1.35	--	54.00		
	6th Cross		2	25.00	1.35	--	67.50		
							521.10		
	Consider 10% for missing and Damaged Slabs						-52.11		
	BS Slab Cover		2	100.00	1.20	--	240.00		
							708.99	80.56	**57116.23**
3	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
	For BS Slab Drain / Missing	Sqm					52.11		
							52.11	665.68	**34688.58**
4	KSRRB M300- Scarifying Existing Granular Surface to a Depth of 50mm by Manual Means. KSRRB M300-52.1. Scarifying the existing granular road surface to a depth of 50mm and disposal of scarified material and complete as per specifications. MORTH Specification No. 305.4.3 (P.No.148, I.No.19.58 of PW,P&IWTD S.R 2016-17)								
	St John's School	Sqm							

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	Road1		1	100.00	6.50		650.00		
	Road2		1	230.00	5.40		1242.00		
	Shriya residency/Varadraj Residency								
	1st Cross		1	75.00	5.50		412.50		
	2nd Cross		1	75.00	4.80		360.00		
	3rd Cross		1	65.00	6.00		390.00		
	4th Cross		1	65.00	5.00		325.00		
	5th Cross		1	60.00	6.50		390.00		
	6th Cross		1	70.00	5.50		385.00		
							4154.50	46.2	**191937.90**
5	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWTD SR 2016-17)								
	St John's School	Cum							
	Road1		1	100.00	6.50	0.25	162.50		
	Road2		1	230.00	5.40	0.25	310.50		
	Shriya residency/Varadraj Residency								
	1st Cross		1	75.00	5.50	0.25	103.13		
	2nd Cross		1	75.00	4.80	0.25	90.00		
	3rd Cross		1	65.00	6.00	0.25	97.50		
	4th Cross		1	65.00	5.00	0.25	81.25		
	5th Cross		1	60.00	6.50	0.25	97.50		
	6th Cross		1	70.00	5.50	0.25	96.25		
							1038.63	1768.08	**1836372.09**
6	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWTD SR 2016-17)								
	St John's School	Sqm							
	Road1		1	100.00	6.50	--	650.00		
	Road2		1	230.00	5.40	--	1242.00		
	Shriya residency/Varadraj Residency								
	1st Cross		1	75.00	5.50	--	412.50		
	2nd Cross		1	75.00	4.80	--	360.00		
	3rd Cross		1	65.00	6.00	--	390.00		
	4th Cross		1	65.00	5.00	--	325.00		
	5th Cross		1	60.00	6.50	--	390.00		
	6th Cross		1	70.00	5.50	--	385.00		
							4154.50	29.68	**123305.56**
7	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17)								
	For Laying BC	Sqm							
	Road1		1	100.00	6.50	--	650.00		
	Road2		1	230.00	5.40	--	1242.00		
	Shriya residency/Varadraj Residency								
	1st Cross		1	75.00	5.50	--	412.50		
	2nd Cross		1	75.00	4.80	--	360.00		
	3rd Cross		1	65.00	6.00	--	390.00		
	4th Cross		1	65.00	5.00	--	325.00		
	5th Cross		1	60.00	6.50	--	390.00		
	6th Cross		1	70.00	5.50	--	385.00		
							4154.50	12.72	**52845.24**

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
8	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)								
	For Laying BC	Cum							
	Road1		1	100.00	6.50	0.04	26.00		
	Road2		1	230.00	5.40	0.04	49.68		
	Shriya residency/Varadraj Residency								
	1st Cross		1	75.00	5.50	0.04	16.50		
	2nd Cross		1	75.00	4.80	0.04	14.40		
	3rd Cross		1	65.00	6.00	0.04	15.60		
	4th Cross		1	65.00	5.00	0.04	13.00		
	5th Cross		1	60.00	6.50	0.04	15.60		
	6th Cross		1	70.00	5.50	0.04	15.40		
							166.18	8013.60	**1331700.05**
9	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17)								
	Edge line	Sqm	2	740.00	0.10	--	148.00		
	Centre line		0.5	740.00	0.10	--	37.00		
							185.00	542.72	**100403.20**
							Total Construction Cost		**3866988.725**
10	Add cost of **Waste Plastic** @ 8% of Bitumen weight								
	Bitumen = 141 kg/cum		--	--	--	--	**1874.51**	27.00	**50612.00**
	Waste = 166.18 X 141 X 8 / 100 = 1874.51								
11							**Cost towards Preparation of DPR LS**		**38670.00**
12							**Cost towards PMC / Third Party inspection LS**		**38670.00**
								Sub Total	**3994940.72**
13							**Miscellaneous and rounding off**		**5059.28**
								Total	**4000000.00**

Certificate.

1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
2 The provisions made in the estimate are necessary and essential.
3 The workspot was inspected and work is found to be necessary.
4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

For Tejus Consultants

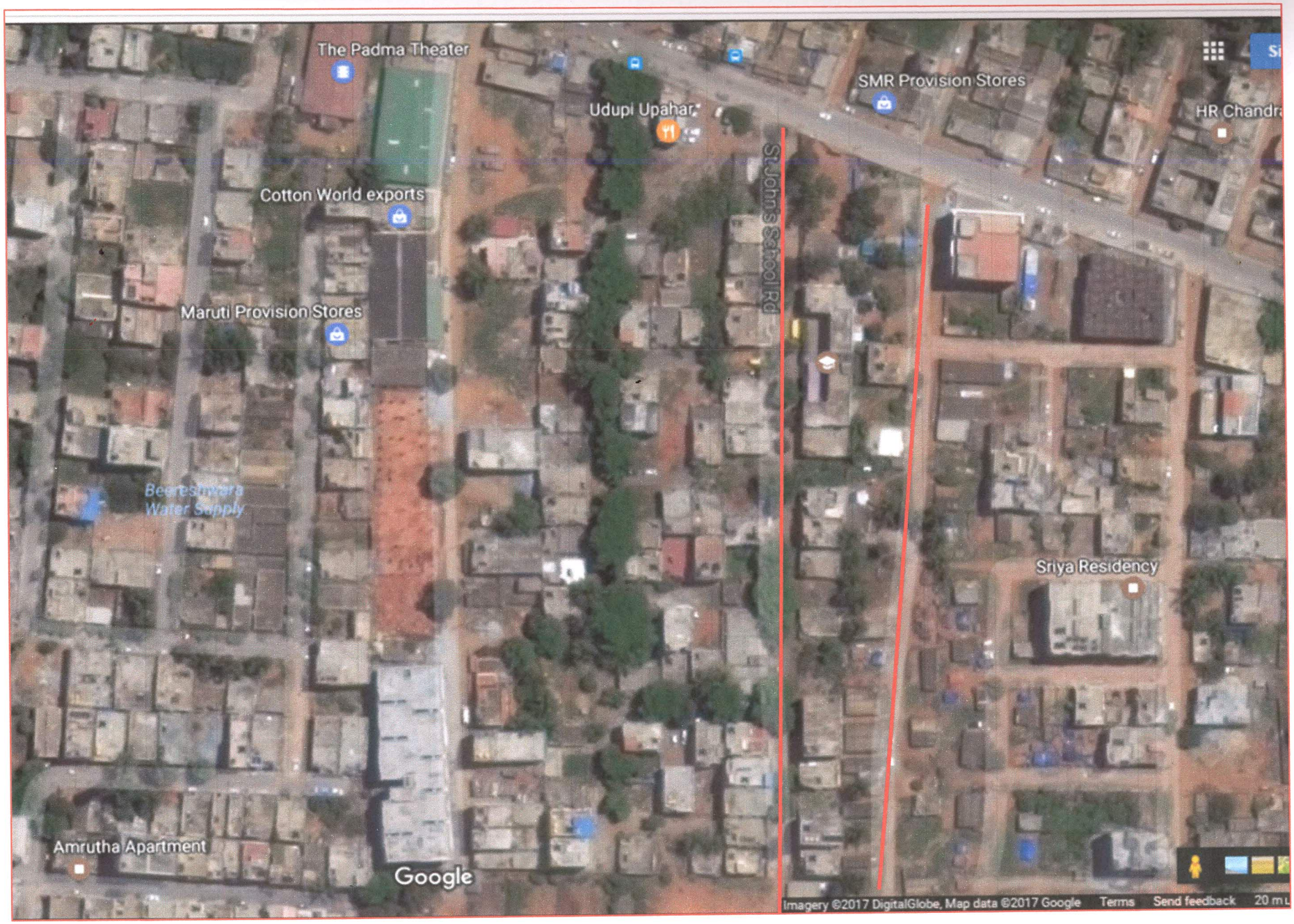
Assistant Engineer

Assistant Executive Engineer

Executive Engineer

AE(W4)

KEY MAP: 9. ST JOHNS ADJACENT ROADS



KEY MAP: 9. VARADRAJU LAYOUT